

ENERGIZATION CYCLE COUNTER FOR INDUCTION HEATING TOOL**ABSTRACT OF THE DISCLOSURE**

5 An induction heat treating process with a sensor for counting the
amount of cycles attributable to an inductor coil. The sensor is preferably a
counting mechanism attached to or embedded within the induction coil and is
preferably triggered by and responds to the change in voltage generated as
the coil is energized. Alternative means of measuring a cycle may be
10 implemented. The output data from the sensor provides useful information for
determining the lifespan of an induction coil. Predicting the lifespan of a coil
optimizes production by anticipating failure and replacement of a coil during a
predetermined down time, limiting on-site inventory, and revolutionizing the
billing cycle based on a per cycle cost while decreasing overall production
15 costs and improving inductor coil quality.